

DIGITALIZATION OF ENGLISH LANGUAGE TEACHING IN HIGHER EDUCATION:

INSIGHTS FROM ENGLISH PREPARATORY
CLASSES IN TURKISH UNIVERSITIES

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Tiivistelmä – Referat – Abstract <p>The rise of the information and communication technologies (ICT) has been revolutionary for the societies of the 21st century. From an educational perspective, ICT tools have transformed traditional teaching and learning practices in many fields, including language education.</p> <p>This study aims to explore how ICT tools are used in higher education, specifically in English preparatory classes of universities in Turkey. Structured, online interviews were conducted with six EFL teachers working in different private universities. The interview questions were designed to identify teachers' ICT use, their attitudes toward ICT tools, and potential advantages and disadvantages related to ICT tools. Qualitative content analysis was used to analyze interview data.</p> <p>Overall, EFL teachers used traditional ICT tools, such as computers, projectors, and interactive whiteboards (IWBs) in almost all classes, and used various Web 2.0 tools to enrich their teaching practice. Besides, teachers expressed their confidence in using ICT tools, and this finding was independent of their history of ICT training. Teachers considered ICT tools as beneficial, highlighting multiple teaching- and learning-related benefits. Teachers considered infrastructure problems as the main challenge related to ICT use.</p>			
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1. INTRODUCTION

I was born in the late 1980s, and I had to wait until high school to use mobile phones (they were not very smart back in the day), and use personal computers to access the internet regularly. In contrast, today's children are born into a world overwhelmed with information flowing from multiple sources of technological devices. Coined in 2001, the terms "digital natives" and "digital immigrants" emphasize the stark differences between our older generation and today's children (Prensky, 2001).

In the 21st century, we live in so-called "information societies." From computers to smartphones, technological devices have transformed our daily lives tremendously, providing us with almost unlimited access to information. Collectively, these devices are described as information and communication technologies (ICTs). ICTs are now more adapted in the educational field, playing critical roles as "facilitators" and complementing traditional teaching tools such as blackboards and books. Televisions, radios, and projectors have been among the conventional ICT tools used in classrooms up until recently, and nowadays interactive whiteboards (IWBs), tablets, e-book readers, mobile phones with internet access are also steering almost all courses in the educational field (Asik et al., 2019). Findings from research studies and insights from teachers' experiences suggest that ICT tools have a positive impact on language learning.

English is arguably the most popular second language in Turkey. English as a foreign language is compulsory from primary education, and students typically continue learning English until higher education. Despite this long journey, foreign language education remains a significant problem. Turkey's penultimate rank in English Proficiency Index (EPI) among 32 European countries (Education First, 2018) reflects this problem. Many factors, including the disparity between state policies and educational practices, incompetence of language teachers, are considered to hamper students from acquiring the desired English language skills (Kocyigit and Erdem, 2018). As a result, students with insufficient English language skills (i.e., those who fail to pass an English proficiency test) have to attend English preparatory classes before starting undergraduate education.

This thesis study aims to explore how ICT is used in EFL education in higher education. Turkey offers a unique example to study this question for two main reasons. First, the concept of "English preparatory classes" reflects not only low English competence in Turkey, but also the inherent

flaws of Turkey foreign language education policies. Second, the efforts in the past 40 years have failed to eliminate the practical differences in language education, which are still evident between state and private schools.

Before I attempt to discuss the curious case of Turkey, one must understand how ICT had become a significant factor in education. In the next chapter, I will try to summarize how ICT has shaped education, discuss specific examples from previous research, and address factors affecting ICT use.

2. ICT

2.1. Technology meets learning: the rise of ICT

The introduction of technology to assist language learning dates back to the mid-20th century. Technological advances in hardware and global internet access were the main drivers behind the frequent implementation of ICT tools; at the same time, they also transformed how ICT tools were used in teaching and learning. During this period, new approaches to language teaching and learning were put forward (Higgins, 1983): computer-aided instruction (CAI), computer-aided language instruction (CALI), and computer-assisted language learning (CALL). A detailed discussion of the relevant concepts extends beyond the scope of this thesis (see (Bax, 2003; Dudeney and Hockly, 2012) for an in-depth discussion).

In the context of teaching and learning, ICT refers to a group of tools that facilitate tasks teachers and students routinely perform. From a functional perspective, teachers or students use ICT tools for creation (podcasts, movie/audio makers, presentation software), communication (email, instant messaging, discussion boards), facilitation (writing/reading/listening/speaking skills), and assessment (Erben et al., 2009).

2.2. ICT in education: friend or foe?

Prensky (2001) stated that older educational systems could not serve the students of 21st century; therefore, it is imperative that various technological tools -computers, mobile phones, IWBs- are used in educational environments to meet the needs of the digital native students. Therefore, it is not surprising that "ICT in education" has been a significant theme issue of research in recent years. Since the beginning of the 21st century, many countries have adapted ICT into their national curriculum framework. For instance, Norway has introduced a reform in education and training, *Knowledge Promotion*, in which "the use of digital tools" is defined as the fifth competence at all

educational levels and in all subject areas (Krumsvik, 2012). Similarly, Australia has also recognized ICT competence as an integral part of the Australian Curriculum (ACARA, 2012).

Does technology provide benefit to teaching and learning? Many studies have attempted to address this question. One of these studies resulted in a new framework to understand how children learn to use technologies through play (Edwards and Bird, 2017). Another study focused on the effects of digital tablets on children's general learning in Swedish preschools (as young learners) and suggested that technological devices positively contribute to learning (Otterborn et al., 2018). Similarly, a case study in American preschools showed that tablets increase children's motivation and create positive outcomes in learning (Lee, 2015).

Research on the potential usefulness of ICT in education revealed multiple benefits, as well as potential drawbacks (Table 1). The most significant advantage of ICT is arguably the way it has transformed teaching and learning; as students become active learners, teachers become "facilitators" in the learning process. In this regard, ICT is a game-changer to transform traditional teaching and learning toward a student-centered approach (Voogt et al., 2013).

Table 1. Advantages and disadvantages of ICT.

Advantages	Discussed in
Helps students carry out classroom activities that are impossible to accomplish with traditional tools	(Postholm, 2007)
Reinforces students' critical thinking skills	(McMahon, 2009; Yuen et al., 2003)
Promotes self-learning and collaboration	(Yuen et al., 2003)
Promotes student-centered learning	(Azmi, 2017; Voogt et al., 2013)
Boosts students' motivation and engagement	(Azmi, 2017; Celik and Aytin, 2014; Livingstone, 2012)
Motivate teachers	(Passey et al., 2004)
Disadvantages	
Misuse of technology	(Rodríguez-Gómez et al., 2018)
Excessive use (overload) of technology	(Weikart & Marrapodi, 1999)
Misleading information	(Md Yunus et al., 2013)

Despite the increased recognition and implementation of ICTs at different educational levels, the often-assumed relationship between ICTs and better education is also challenged by many critics (Livingstone, 2012). Fuchs and Wössmann (2005) argued that reanalysis of Programme for International Student Assessment (PISA) data actually points to a statistically significant negative correlation between the use of new ICTs and internet at school and learning outcomes. Arnesen

(2010) also discussed this finding in his Master's thesis to give examples of the adverse effects of ICTs on students' learning in Norway.

2.3. Factors affecting ICT use

Successful integration of ICT into teaching practice depends on multiple factors. The presence or absence of such factors either poses a challenge for teachers or facilitates their ICT use.

2.3.1. Extrinsic challenges

Researchers have classified extrinsic challenges from different perspectives, using definitions such as "first-order barriers," "school-level barriers," or "material barriers." (reviewed in (Bingimlas, 2009)) Since the majority of extrinsic challenges are related to the infrastructure, they are considered as "meso-level" barriers from an analytical perspective. Donnelly et al. (2011) suggested that improved financial support is the answer to overcome many, if not all, of such challenges.

As illustrated in Figure 1, "infrastructure" determines the amount and type of ICT tools available to teachers, the access to these tools, and technical assistance teachers may need as they use ICT tools. Effective use of ICT tools by teachers and students depends on their availability, as well as accessibility. The insufficient number of ICT tools may cause teachers to share these tools with their colleagues, thus limiting their use. In addition, the possibility of facing technical problems during the use of technological resources may push teachers to have backup plans or even to seek alternative approaches. In this context, an extrinsic challenge may also create a secondary intrinsic challenge and prevent effective use of ICT tools in classrooms.

The first studies on extrinsic challenges considered internet access among the main factors against ICT use in European schools (Pelgrum, 2001). Lack of technical support may also cause teachers to avoid using ICT tools, as some teachers believe that technical problems encountered during the use of ICT tools are likely to disrupt the normal flow of the lesson (Bingimlas, 2009; Hatlevik and Hatlevik, 2018).

Subject curriculum and time are two interconnected extrinsic factors that affect teachers' ICT use. The subject curriculum is the fundamental factor that designates the type of tasks carried out in classrooms; a content-heavy curriculum will certainly hinder teachers from enriching their lessons with complementary tools, such as ICT. Besides, the time teachers spend on planning lessons,

searching for relevant content, and practicing will determine how often and for how long teachers can use technology in classrooms. Indeed, studies conducted in Saudi Arabian (Al-Alwani, 2005), English (Hennessy et al., 2005), South Korean (Nim Park and Son, 2009), and Iranian (Rahimi and Yadollahi, 2011) schools acknowledged these factors as significant barriers against ICT use.

2.3.2. Intrinsic challenges

Intrinsic challenges, compared to extrinsic challenges, are considered to have a stronger impact on teachers' technology acceptance (Blundell et al., 2016; Eickelmann and Vennemann, 2017)). Among many theoretical models proposed to explain the underlying causes, the most notable example is Davis's original Technology Acceptance Model (TAM) (Davis, 1989), which was followed by extensions of TAM and ultimately the Unified Theory of Acceptance and Use of Technology (UTAUT) (Venkatesh et al., 2003). In this thesis, I will approach intrinsic challenges according to a simplified hypothetical model (Figure 1). According to this model, the teaching approach is shaped by three major factors: self-efficacy, training, and attitudes.

Self-efficacy is the first intrinsic factor that shapes ICT use; at the same time, it also contributes to the development of a constructive attitude toward ICT tools. Bandura (1977) defines self-efficacy as "one's beliefs in their own capacity to perform an action." In education, self-efficacy refers to a self-evaluation of capabilities to use technological tools, which plays a key role in applying these tools in language teaching. In other words, how teachers perceive their ICT competence is assumed to be directly associated with their attitude towards ICT tools in language teaching. Teachers with a high level of self-efficacy and low level of computer anxiety are more likely to have positive attitudes, and therefore adopt ICT tools in a classroom environment (Sang et al., 2010). Familiarity with technological tools also plays a significant role in teachers' acceptance of computers (Rozell and Gardner III, 1999). Teachers may also avoid using ICT tools because they experience fear of making mistakes and destructing ICT tools. While this intrinsic challenge is related to teachers' self-efficacy, the possible contribution of previous pedagogical training should be considered as well.

The second factor is technology competence, which is primarily achieved through training. Technology competence is typically achieved by pre-service or in-service training programs, which aim to equip teachers with technological and pedagogical competence (Gellerstedt et al., 2018). It is only logical that pedagogical training should follow technical training since teachers should be

equipped with basic ICT skills before they are introduced to the pedagogical concepts they will apply in their teaching practice. The lack of ICT training is one of the most cited intrinsic challenges in the literature.

The third major intrinsic factor contributing to ICT use is teachers' attitudes. A positive attitude towards technology contributes to the successful practice of ICT use in EFL classrooms, whereas negative attitudes, including resistance to change, prevents teachers from using these tools. Cox (1999) emphasized the importance of being open to change and stated that teachers need to believe in the necessity for a change to apply new technological tools in classrooms. However, being open to change does not guarantee successful adoption of ICT in teaching practice; teachers need to be aware of the potential benefits of ICT and be willing to use these technological tools to the benefit. Finally, as Bingimlas (2009) pointed out, resistance to change does not exist in all countries.

Although not included in the abovementioned hypothetical model, previous studies have considered gender as an intrinsic barrier against ICT use. In almost all previous studies, researchers hypothesized that male and female teachers/students use ICT tools with different frequency and competence. The potential role of gender was explored mostly in developing countries (Best and Maier, 2007; Guillén-Gámez et al., 2019), and to a lower extent in developed countries (Ilomäki, 2011; Volman et al., 2005). Multiple studies in Turkey indicated that gender does not affect the integration of ICT in teaching practice (Aslan and Zhu, 2017; Ata and Yildirim, 2019).

Based on the main extrinsic and intrinsic challenges discussed in the previous paragraphs, I formulated a conceptual network to better visualize the contributions of these factors to ICT use (Figure 1). This network also illustrates the relationships among the factors.

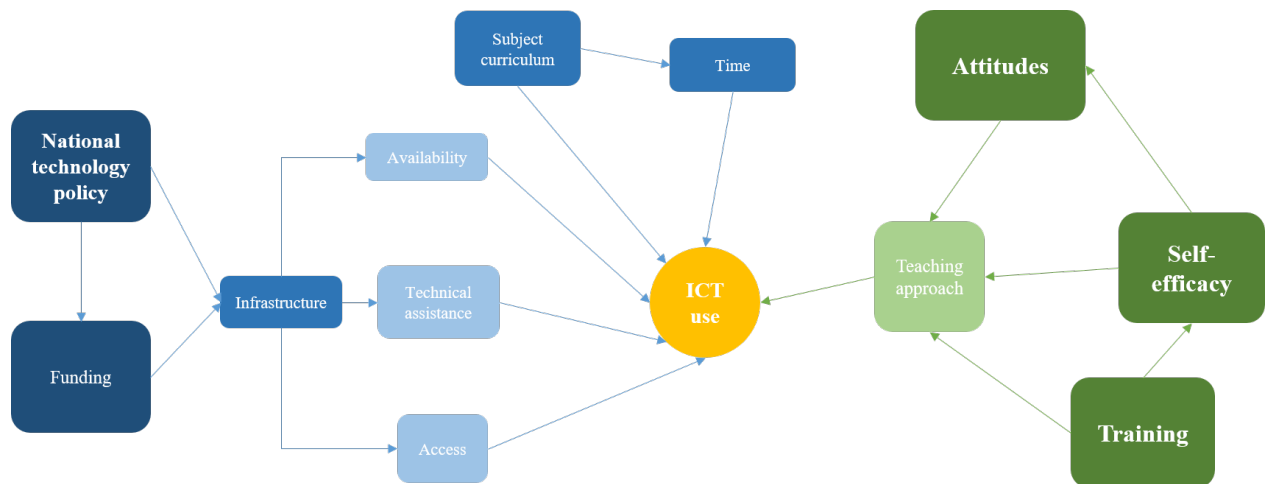


Figure 1. Factors affecting ICT use. A network of extrinsic (blue) and intrinsic (green) factors affect ICT use in classrooms. Larger shapes with darker color indicate the central nodes of the network. (Adapted from (Finger and Houguet, 2009))

3. THE CASE OF TURKEY

As briefly described in the Introduction, Turkey offers a unique example to study EFL teaching and learning, mainly for two reasons:

1. While English is the most popular second language, Turkey has a poor ranking in terms of English proficiency.
2. Turkey's national policies and action plans to improve foreign language education and promote ICT use in education have been ineffective. The vast differences between state and private education institutions at different educational levels reflect this shortcoming.

This chapter starts by revisiting the history of English in Turkey. Then, I will describe the nationwide efforts to promote and integrate ICT in teaching and learning. I will conclude the chapter by discussing specific examples from the literature, focusing on different aspects of ICT and EFL.

3.1. A brief history of English in Turkey

From a historical viewpoint, the introduction of English as a foreign language dates back to the time of the pre-republic era, in the late 18th century (Kirkgoz, 2007). Following the establishment of the Republic of Turkey and the language revolution, Turkey directed its efforts toward removing the "negative influences" of Arabic and Persian; at this stage, focus on foreign language learning was minimal, and French was still prioritized over English. After World War II, English replaced French as *lingua franca*. Then, the actual "bloom" did not start until the Law for the Foreign Language Education and Training (Law 1983-2923) came into effect; over the next 20 years, the number of secondary schools that provided English medium education increased by four-fold (Kirkgoz, 2007).

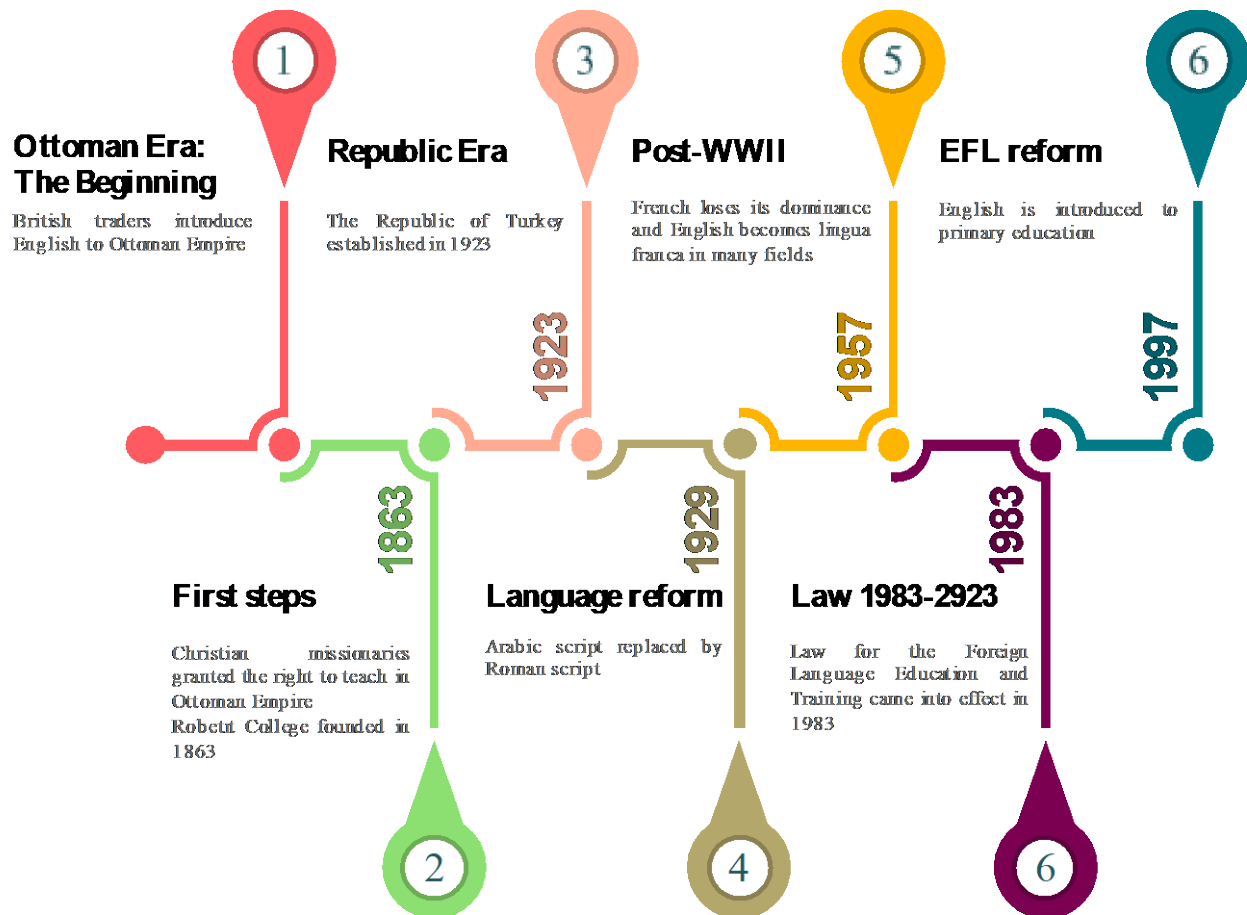


Figure 2. Important milestones in the history of English in Turkey. (Adapted from (Zok, 2010))

The year 1997 marks another pivotal point in Turkey's education system. The language reform initiated by the Ministry of National Education and the Turkish Higher Education Council resulted in two crucial changes (Kirkgoz, 2007):

- 1) The duration of compulsory primary education increased to eight years
- 2) English was introduced to the primary education curriculum, starting from Grade 4

In addition to these changes, the language reform of 1997 also brought changes in higher education, including the redesign of teacher education departments and the introduction of a dedicated course aiming to teach English to young learners. These changes were followed by the organization of in-service training programs for EFL teachers, and the establishment of a teacher education program based on distance learning to meet the shortage of teachers.

On a side note, based on personal experiences as a former EFL teacher in preschools, students in private preschools are introduced to English during voluntary preschool education, starting as early as three years of age. This finding is one of the critical reasons for the inequality in Turkish education; indeed, Turkey holds the last rank in preschool equality and enrolment rate among 41 countries (UNICEF Office of Research, 2018).

2.5. ICT in Turkey

The history of ICT integration to teaching practices in Turkey dates back to the 1980s when the Ministry of National Education established a dedicated commission on computer education in secondary schools (Karakaya, 2010). In the next ten years, Turkey directed its efforts toward equipping more than 2000 secondary schools with computers.

In 1998, the Ministry of National Education introduced ICT courses into teacher preparation programs and made it mandatory for pre-service teachers in both primary and secondary education to complete two courses to fulfill the requirements for their teaching credentials (Goktas et al., 2008). The first course aimed to provide teachers with necessary ICT skills, while the second course was designed to build up prospective teachers' competence in material development. However, both courses were offered only in one semester and lasted for four-five hours per week.

In the same year, the government also initiated the first project to promote ICT use in education. Funded primarily by the Turkish government (US\$2.2 billion) and partially by the World Bank (US\$286 million), this ambitious project (World Bank, 2004) had four main objectives:

- 1) Improve student enrolment rate in primary education,
- 2) Train teachers, principals, and inspectors,
- 3) Reconstruct/rehabilitate facilities destroyed or damaged during the Marmara earthquake of 1999, and
- 4) Create a monitoring and evaluation mechanism for the program.

Except for the improved enrolment rate in eight-year compulsory education (from 86% to 96% over six years), the program, unfortunately, failed to meet the majority of its objectives and received heavy criticism. The second project dates back to 2010 when the Ministry of National Education initiated the "FATİH Project," which aimed to provide ~40,000 schools and ~570,000 classrooms with a modern ICT infrastructure. The initial project plan was to complete the project

in three phases over five years; however, the project was still incomplete in 2015. Besides, as discussed by Çoruk and Tutkun (2018), the project received heavy criticism for "poor infrastructure and technical problems," "restricted and inadequate educational content," "lack of in-service training for teachers," and "problems in classroom management."

2.6. ICT use in EFL classrooms: competences, perceptions, and attitudes

Quantitative studies dominated the previous research on ICT use in EFL classrooms, but a small number of qualitative studies also provided valuable insights. These studies covered multiple aspects, including "attitudes and perceptions related to ICT," (Ardic and Ciftci, 2019; Ata and Yildirim, 2019; Baran et al., 2019; Cakir et al., 2015; Cakiroglu et al., 2017; Kuskaya-Mumcu and Kocak-Usluel, 2013; Tezci, 2009) "ICT integration," (Basak and Ayvaci, 2017; Ozdemir and Kilic, 2007) and "ICT competence." (Ardic and Ciftci, 2019)

Aslan and Zhu (2015) surveyed 782 pre-service teachers and interviewed 15 pre-service teachers to evaluate their perceptions of ICT integration in education. The majority of the teachers agreed that ICT use is necessary or useful, and will have a positive contribution to teaching and learning processes. Teachers also pointed out other benefits, such as "saving time," "making learning permanent," and "helping students understand abstract concepts." Regarding the perceived drawbacks, teachers emphasized "lack of experience" and "lack of ICT skills" as the main barriers against ICT use. Besides, a teacher emphasized a potential drawback, stating that using IWBs may harm students' written expression.

In another example, Akbulut et al. (2011) carried out a cross-sectional study to explore the perceptions of pre-service teachers from six different universities regarding ICT in their departments. Overall, the results from 2515 pre-service teachers portrayed a negative picture, revealing that teacher training programs did not promote integration and use of ICT tools for instructional purposes, faculties have weak ICT infrastructure and could not provide sufficient technical assistance.

As discussed in the context of intrinsic challenges, having a positive attitude toward ICT is associated with more frequent use of ICT. Research on attitudes of EFL teachers in Turkey has yielded positive findings. Celik and Aytin (2014) carried out a qualitative study with six EFL teachers to explore teachers' attitudes toward ICT use. Teachers highlighted multiple benefits of ICT, stating that ICT use improved students' motivation and attention, facilitated time management

and student evaluation, and offered interesting and interactive presentation techniques to teachers. From teachers' perspectives, disadvantages of ICT use were limited and included issues with classroom management, technical problems, and need for student supervision. However, not all teachers consider ICT as a beneficial tool in language teaching. In one example, Hismanoglu (2012) explored the attitudes of 85 prospective ELT teachers in distance higher education. While teachers considered ICT as a useful tool to learn new things, they expressed negative attitudes against its use, mainly due to "lack of exposure to lessons fully designed with ICT tools," "exam-driven system, " and "studying only to learn what is to be tested."

Aydin et al. (2016) compared the level of ICT integration between state and private schools. Their findings showed that teachers in state schools used ICT tools at a lower frequency, and mostly for administrative purposes. This finding is supported by other studies on teachers with varying teaching experiences, working at different educational levels; these studies identified low self-efficacy and lack of necessary training as the main responsible factors (Aslan and Zhu, 2018, 2017; Tezci, 2009). In another example, Merç (2015) conducted a study on 86 pre-service ELT teachers in Turkey and determined that almost half of the teachers used ICT tools less than 1-2 times a week. Teachers also pointed out to insufficient technology infrastructure in many schools; this was reflected in the finding that more than half of the teachers did not have access to a language lab, TV/video player, projector, IWB, and a computer with an internet connection.

For instance, Ardic and Ciftci (2019) conducted a study on ~200 EFL teachers from different cities in Turkey and determined that teachers considered themselves incompetent in multiple ICT competence areas, and need additional training/professional development. Another highlight of this study was that with regards to training or professional development, EFL teachers preferred methods involving active participation over traditional methods (e.g., seminars, workshops).

3.7. The rationale for the study

Despite the attempts to integrate ICT into teaching practices and improve the level of language education in primary and secondary education, students in Turkey are considered to experience inadequate levels; therefore, preparatory classes, offered by departments of foreign languages in state and private universities, are considered as the solution to address this shortcoming (Kocyigit and Erdem, 2018). In the case of language teaching, ICT tools are used at all educational levels in Turkey. Quantitative studies have dominated the research on the use of technology in education;

however, many of these studies lacked diversity in their study population (e.g., focused on a single institution) or the quantitative approach could not yield in-depth information from the study participants. Besides, many of these studies did not focus on private universities. To address these shortcomings, I aimed to conduct this qualitative case study on multiple private universities in Turkey.

The present study aimed to explore English teachers' ICT use in EFL classrooms concerning advantages and challenges. By interviewing teachers from different private universities in Turkey, I will attempt to identify the following research questions:

1. What type of ICT tools do ELT teachers use in EFL classrooms in private universities? For what purposes?
2. What are the attitudes of ELT teachers toward ICT tools?
3. From the teachers' perspective, what are the advantages and disadvantages of using ICT tools in EFL classrooms?

4. RESEARCH METHODOLOGY

4.1. Research Design

The main objective of this study was to provide and insight into teachers' experiences and attitudes on ICT use in EFL classrooms. Thus, this study adopted a qualitative research design, as it seeks in-depth insights and experiences of the participants (Stake, 1978). Unlike quantitative research studies that require *a priori* power calculations to determine the minimum sample size to demonstrate the expected effect of a given intervention, specific formulas to calculate adequate sample do not exist for qualitative research (Malterud et al., 2016). Instead, qualitative studies aim to reach saturation, the point at which no new information can be obtained from additional data (Guest et al., 2006). As part of the qualitative research design, the interviews were held with Turkish EFL teachers to elicit comprehensive information regarding ICT use in EFL teaching.

4.2. Data collection method

A structured interview is an organized data collection instrument that typically involves a series of close-ended questions requiring short answers. In this regard, structured interviews are considered to be similar to self-administered questionnaires (Alshenqeeti, 2014). Semi-structured interviews, on the other hand, involve open-ended questions, thus providing researchers with freedom and flexibility in interview design, and enable them to get detailed responses from interviewees. By combining a structured interview approach and open-ended questions, this study aimed to maximize the level of information obtained from the participants, which would facilitate categorization and comparison aspects of data analysis.

The interview questions were based on previous studies and in light of the research questions of this study. Before the interviews, all participants were given detailed information about the purpose of the study, and informed consent forms were obtained from all participants. The participants were informed that all information obtained from the interviews would remain confidential.

The interview consisted of nine open-ended questions formulated in English. Paragraph-size blanks were under each question so that the participants were able to provide detailed answers. Interview questions were sent to the participants by email, and responses were collected by email as well. A copy of the interview questions is presented in Appendix A.

4.3. Data analysis

The qualitative content analysis (Richards, 2003) was used to analyze the interview data. The names of the participants were anonymized before the analysis to preserve their confidentiality. First, the descriptive coding method was used to categorize the data into pre-planned themes systematically. Then, analytical coding was used to identify the patterns and differences between data. Afterward, reflecting memos were written to simplify the data by highlighting the connections and patterns. Data interpretation was made after grouping the data into four broad categories:

- Types of ICT tools used and the frequency of ICT use
- Previous ICT training
- Advantages of ICT use
- Challenges associated with ICT use

5. RESULTS

Online interviews were conducted with nine EFL teachers working in English preparatory classes of different private universities in Turkey. Teachers' work experience ranged from 1.5 to 12 years (Table 2).

Table 2. Background information on teachers

Teacher	Type of employment	Teaching experience (years)	Previous ICT training	ICTs applied in the classroom	ICT use (hours/week)
A	Part-time	1.5	Yes	PC, projector, IWB, Kahoot, Socrates, PollEv	3
B	Full-time	6	No	PC, projector, IWB, Voscreen	16
C	Full-time	7	Yes	PC, projector, IWB, Cambly	10
D	Full-time	7	Yes	PC, projector, IWB, Kahoot, Quizlet, Google Classroom, Edmodo	15
E	Full-time	7	Yes	PC, projector, IWB, Kahoot	25
F	Full-time	8	Yes	PC, projector, IWB, mobile phone	35
G	Part-time	8	No	PC, projector, IWB, Kahoot	6
H	Full-time	8	No	PC, projector, IWB	18
I	Full-time	12	Yes	PC, projector, IWB, Kahoot, Quizlet	19

5.1. Types of ICT tools and the frequency of ICT use

All teachers used PC (desktop or laptop), projector, and IWB almost every lesson mainly for coursebook activities, songs, audios, podcasts, and videos. Teacher F was the only participant that used mobile phone in the classroom for educational purposes. Regarding daily coursebook activities, Teacher H emphasized the significance of ICT tools:

- (1) *"For each lesson, we need to project the course pack on the board to make the flow of the lesson clearer for the students. Also, each of our weekly components includes at least one video or listening recording as an activity or an assignment."*

Teacher B mentioned how they benefit from coursebook materials by using ICT tools:

- (2) *"Our coursebook provides us with BBC Podcasts, which we can use to teach some common phrases and everyday expressions."*

Teachers mentioned that ICT tools have a positive impact on student engagement, particularly through fun activities. Teachers also stated that ICT tools are contributory assets to improve students' language skills through listening, grammar, or vocabulary activities. Five teachers used interactive games such as Kahoot and Quizlet for various reasons: to revise grammar and vocabulary, to test students' memory and level, and to take class polls. Teacher D used Google classroom and Edmodo as useful tools for class communication and assignments. In addition to these platforms, Teacher D encouraged students to use free online course platform Coursera as part of their assessment. Besides, Teacher D used Vlogs to make students practice course topics and their language skills. Teacher B also used Voscreen videos to improve students' pronunciation and listening skills. Teacher F used online reading platforms to improve students' reading and listening skills, and mobile phones to record videos or voice messages as part of speaking assignments. Two teachers used song activities (fill in the blanks or organize the lyrics) to practice vocabulary and grammar. Four teachers used ICT tools for PowerPoint presentations in order to improve students' speaking skills.

5.2. Teachers' history of ICT training

Six teachers stated that they received training for ICT use, whereas three participants were self-trained. Teacher G had no prior ICT training, but pointed out to other opportunities regarding technology:

- (3) *"I have not received any training, especially for using ICT tools, but some courses I attended (like CELTA) gave me the opportunity to improve myself and explore more recent techniques. In the institution that I am working at, we have a "teacher development unit," there we lecturers sometimes get the chance to explore some "new" or "unknown before" tools that are likely to be implemented in our courses."*

Teacher B, who also did not have ICT training, appreciated the opportunity to receive ICT training, but also pointed to self-learning of technology:

(4) *"I do not think it is necessary for young teachers who are already familiar with the technology. However, it would be a great chance to have this kind of training if teachers feel not competent and confident enough. It would also be useful to learn about the modern tools we have not heard of yet."*

In terms of technology use (or technology competence) in class, Teacher C emphasized the importance of being one-step ahead of the students:

(5) *"I think it is necessary because teachers should update themselves. If students are beyond teachers, lessons will not be interesting for students."*

Teacher A, who had the shortest teaching experience among the participants, highlighted that teachers need proper ICT training from experienced people:

(6) *"I think it is necessary to receive training, especially from the trainers who use them in their classrooms. They can tell what works in a real classroom setting."*

Overall, while almost all teachers were confident about using ICT tools in the classroom, they sought opportunities to improve themselves on ICT tools where possible.

5.3. Benefits of ICT use

Considering the advantages of using ICT tools in the classroom, all teachers highlighted the positive changes in students' progress. Teachers stated that students are more engaged and motivated during EFL classes when ICT tools are used. They also believed that students are more focused and entertained when they are engaged in ICT tools. Teacher B emphasized the positive impact of ICT tools on students' progress when they have fun:

(7) *"When the teacher uses videos, songs, or games students are interested in, they are more focused and motivated in the lessons. As mobile phones and computers are inseparable parts of their social lives, doing homework on online platforms is easier and much more fun for them, and it keeps them motivated outside the classroom while studying or doing assignments. In addition to keeping them motivated, it also makes the learning permanent."*

Teacher B also believed that students' productive skills had developed more, along with the use

of ICT tools in EFL classes. Teacher C mentioned how ICT tools bring diversity to EFL courses:

(8) *"They (students) do not like just listening to a lecture. Last week, I tried M-learning activity in my lesson; it was the 'Cambly' application that gives students instant access to native English speakers over video chat, so they gain confidence while talking in English. They had so much fun and told that they had improved their English in terms of pronunciation, fluency, etc."*

Similarly, Teacher F mentioned the diverse benefits of ICT tools in EFL classrooms:

(9) *"There are a lot of advantages of using ICT tools in a classroom environment, such as diversifying the lesson's plan, changing activities to refresh the student's attention, entertaining the students, etc. Furthermore, ICT tools often help us to bring students closer to the real usage of the English language and make them listen to native speakers. "*

Concerning the indispensable presence of ICT tools in EFL classes in recent years, Teacher G stated that EFL lessons would be monotonous without ICT tools:

(10) *"Well, we are in the 21st century, and the changing world of course also changes teaching methods and techniques. Students' profile has changed a lot, too. This means there is a great demand, and we need to provide ICT tools in schools."*

Furthermore, Teacher G compared ICT tools and traditional teaching methods:

(11) *"I use ICT tools to engage students because I am in the opinion that they acquire a language better through these technological tools rather than the traditional methods."*

Teacher D emphasized how ICT tools assist self-learning:

(12) *"Use of ICT allows autonomous learning- we teach students how to learn by themselves using different applications and other tools and thus this can speed up the rate of learning. "*

In sum, all teachers except one (Teacher H) stated that ICT tools improve students' motivation in EFL classes (Figure 3); provide EFL teachers with new sources of information and knowledge as well as higher quality of education and new ways of interaction. ICT tools also provide flexibility, creativity, and speed, and help EFL teachers save time while preparing materials and teaching language.

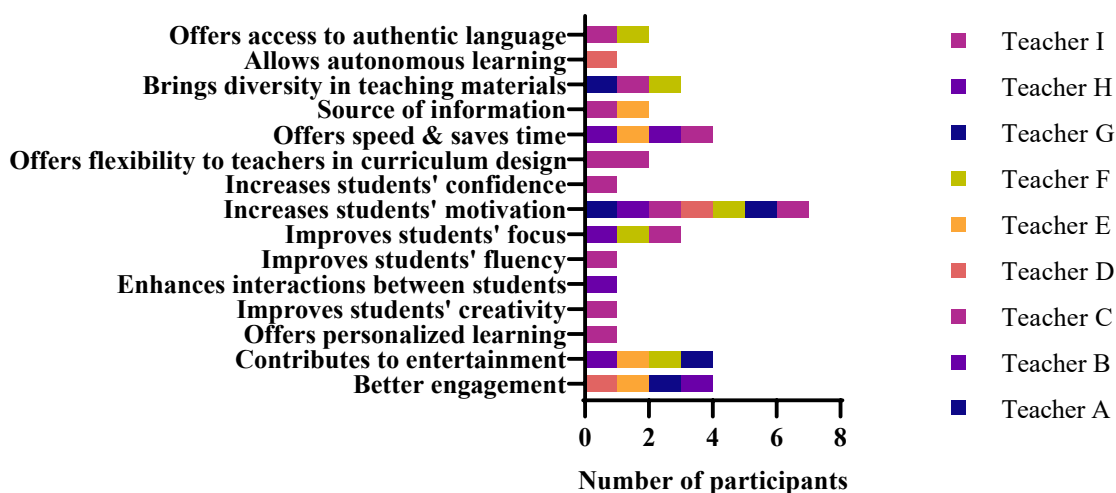


Figure 3. Benefits of ICT use in EFL classes.

5.4. Challenges associated with ICT use

Four teachers pointed out technical problems, including poor internet connection and power cuts, as well as suboptimal infrastructure in their institutions (Figure 4). Notably, this factor covered the insufficient number of equipment, old and overused equipment, and the inconvenient physical conditions of the classrooms.

Concerning the use of smart phones in language teaching, Teacher D pointed out potential problems:

- (13) *"When you allow the use of smartphones in the classroom you run the risk of students getting distracted and using them for other purposes, like social media. In addition, although most students these days have phones, there are still students at different economic levels and with different types of smartphones. This may put some students in an uncomfortable situation."*

Teacher C particularly drew attention to the "excessive use" of ICT tools during language instruction:

- (14) *"When ICT tools are overused, students tend to neglect learning resources other than computer and the internet."*

Teacher C also pointed out to a potential drawback, stating that excessive use of ICT tools may limit students' imagination. Similarly, Teacher G referred to the unintended results of unlimited use of ICT tools by considering students' distraction as a challenge for teachers:

(15) *"To be honest, I do not experience many problems, but sometimes it is the case that while applying an ICT tool some students consider this as "free time" to check their phones or they get distracted. In a word, it is the case that there can be problems in classroom management at that time on occasion."*

Teacher D also drew attention to how ICT tools can lead students to laziness:

(16) *"Access to the internet can sometimes make students lazy and unwilling to think for themselves. This is a problem when it comes to critical thinking activities like debates or essay writing. "*

As a significant point on challenges in the language learning environment, Teacher G remarked on the differences in students' abilities and performances:

(17) *"I have seen that the majority (students who are better in English) is more motivated, whereas the weaker students are less motivated in games especially. The minority is shy, and they fear to make mistakes."*

Finally, Teacher E pointed out collegial challenges regarding the use of technology in EFL classrooms:

(18) *"Working with co-teacher that is reluctant to use technology can be a challenge, as well. "*

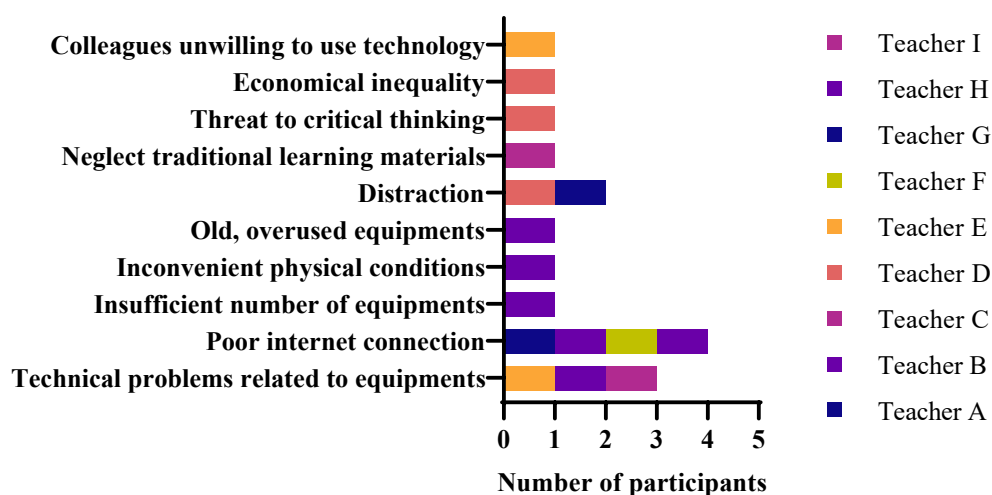


Figure 4. Challenges associated with ICT use in EFL classes.

Overall, teachers' responses indicate that extrinsic challenges, especially those related to ICT infrastructure, are the main problems encountered in their teaching practice.

6. DISCUSSION

The main goal of this qualitative research study was to explore the attitudes and teaching practices of EFL teachers toward ICT use. Online interviews were carried out with nine EFL teachers working in different private universities in Turkey.

The first two questions aimed to assess how often teachers used ICT tools in their teaching practice, as well as their overall experience with ICT tools. All teachers stated that they used ICT tools in almost every class, and teachers' ICT use ranged from 3-35 hours per week. Given that teachers were working part-time used ICT tools at a lower frequency compared to teachers working full-time, the type of employment appears to be the main reason for the observed differences in frequency of ICT use. The existence of English preparatory classes in higher education is a unique feature of Turkey's higher education system; for this reason, it is not possible to compare the teaching practices of EFL teachers in Turkey with other countries.

The third question aimed to determine the type of ICT tools used, and the purpose(s) using such tools in EFL classrooms. All teachers used PCs, projectors, and IWBs in their teaching practice, mainly to carry out coursebook activities, such as songs, audios, podcasts, and videos. In addition to these classical ICT tools, teachers also benefited from mobile phones, Web 2.0 tools, such as

Kahoot or Quizlet, Google Classroom and Edmodo to enrich their teaching practice as well as students' language skills.

The fourth question aimed to identify whether teachers received any formal training for ICT tools and their thoughts on the need for ICT training. Six teachers had previous training, whereas three teachers did not receive any formal training. Moreover, all participants agreed on the need for formal training. These two findings support previous studies (Aydin et al., 2016). Teachers also emphasized the importance of being "one step ahead" of students and pointed out that self-learning of technology may help teachers stay up to date with technological advances.

The fifth question aimed to reveal teachers' evaluation of their ICT competence. All teachers stated that they are confident enough to use ICT tools in the classroom. This finding is quite interesting since previous studies in Turkey suggested that teachers considered themselves as partially competent/incompetent in this aspect (Ardic and Ciftci, 2019). While it is possible that all teachers are equipped with sufficient technological skills to apply ICT tools in their teaching practice, this observation may simply result from teachers' overconfidence, considering that the question was formulated to assess perceptions, rather than actual competences.

The sixth and seventh questions aimed to reveal the perceived advantages and challenges of using ICT tools in classrooms. One of the critical advantages of ICT tools is promoting student-centered learning (Azmi, 2017); however, teacher-centered use of ICT tools, mostly for routine tasks (e.g., preparation and delivery of teaching materials) is likely to make students passive (Li and Ni, 2011). In the current study, teachers benefited ICT tools to engage students in different activities. As a result, all teachers except one stated that ICT tools improved students' motivation and attention in EFL classes. Teachers also pointed out to teaching-related benefits of ICT; these factors included providing teachers with new and authentic sources of information, providing flexibility in curriculum design, enhancing creativity, and helping teachers save time when preparing materials.

Regarding the perceived challenges, six teachers mentioned extrinsic challenges related to ICT use, giving examples of poor internet connection, power cuts, insufficient number of equipment, old and overused equipment, and the inconvenient physical conditions of the classrooms. This finding is not particularly surprising since many of these factors have been previously highlighted as common challenges related to ICT use (Bingimlas, 2009; Ekberg and Gao, 2018; Hatlevik and Hatlevik, 2018). Two teachers highlighted a potential disadvantage, stating that overuse of ICT

tools may cause distractions; this may explain why these teachers used ICT tools with a lower frequency compared to other participants. Besides, one teacher pointed out the potential risk of using ICT tools for non-educational purposes as well as discouraging students' critical thinking. Finding new and relevant digital resources can be a time-consuming task for teachers (Ekberg and Gao, 2018), and for this reason, teachers may be reluctant to use ICT tools in classrooms. In the current study, none of the teachers indicated this as a challenge, and this may result from the fact that almost all departments at higher education institutions in Turkey develop and prepare annual teaching plans, which provide teachers with clear instructions on the type of ICT tools and their duration.

The eighth question aimed to identify whether ICT tools contributed to students' progress in EFL classes. Overall, teachers agreed that ICT tools helped students to improve their language skills. It is also worth noting that one teacher pointed out that ICT tools may help students to increase their productivity while another teacher emphasized that ICT tools aid students to learn by themselves.

The last question aimed to identify teachers' thoughts on the impact of ICT tools on students' engagement and motivation in classes. Overall, teachers pointed out to teaching- and learning-promoting benefits of ICT. Regarding teaching-promoting benefits of ICT, teachers stated that ICT use "offered diversity in teaching materials," "facilitated teaching," "helped (them) to save time (when preparing for a class)," and "offered flexibility in curriculum design." Regarding learning-promoting benefits of ICT, the majority of the teachers (seven of nine) agreed that ICT use "improved students' motivation." Considering the pivotal aspect of motivation in second language learning (Dörnyei, 1998), this finding further supports the previous research on the motivation-promoting impact of ICT (Azmi, 2017; Bilyalova, 2017; Ghasemi and Hashemi, 2011). Teachers also pointed out to previously reported benefits of ICT, including "maintaining students' focus," "contributing to creativity," (Wheeler et al., 2002) and "offering a personalized learning opportunity." (Ferreira and Castiglione, 2017; Sung et al., 2016)

As a potential, emerging challenge, we cannot overlook the possibility that the use of certain ICT tools will be no longer "appealing" to many, if not all, students, as many students have access to multiple ICT tools at home. This is likely to prevent teachers from using such tools as motivating factors.

7. LIMITATIONS

Qualitative case studies are often carried out on small samples selected through convenience or purposive sampling strategies (Etikan et al., 2016). The first and the major limitation of the current study concerns the small sample size. While the study provides potentially useful insights into teachers' attitudes and practices, the results do not fully reflect the diversity of Turkey's education system, and therefore, cannot be generalized.

The second limitation concerns the sampling procedure. The initial study plan was based on a mixed-methods approach that combined qualitative (interviews) and quantitative (questionnaires) components. However, due to the difficulties of recruiting an adequate number of participants, a qualitative approach was used. Interviews were conducted with a limited number of participants selected from private universities through convenience sampling. Thus, EFL teachers working in state universities are not represented in the study, creating potential bias in study findings. Given the potential infrastructural differences between state and private universities in Turkey, this factor may affect participants' responses with regards to the frequency of ICT use and the type of ICT tools used.

In qualitative research, testing the research instrument in a pilot study can provide beneficial information to the researcher (Mikuska, 2017). However, in this research project, the interview questions were not tested in a pilot study. Despite the lack of unanswered interview questions, brief answers provided by some of the participants imply that participants may have not fully understood the questions, thus implying potential ambiguities in the formulation of the questions.

8. CONCLUSION AND DIRECTIONS FOR FUTURE RESEARCH

This case study showed that EFL teachers in private universities in Turkey have different preferences regarding the frequency of ICT use in their teaching practice. Besides, teachers do not have equal ICT competences; a history of formal ICT training is likely to contribute to teachers' ICT competence, which in turn may affect teaching style.

To better understand the current status of ICT in language teaching, future studies will benefit from consideration of the following variables:

- **Geography:** Turkey's geographical regions show diversity in many aspects, but, arguably, the most remarkable difference is seen in terms of socio-economic development, which contributes to the inequality in Turkey's education system. Karakaya (2010) explored this variable and determined that the geographical region did not have a statistically significant impact on the attitudes of ELT teachers working in primary and secondary education. Future studies involving universities from multiple geographical regions may reveal the similarities and differences in ICT use.
- **School type:** In general, the majority of private universities in Turkey have better funding opportunities compared to state universities. Therefore, it is logical to assume that this factor is reflected in the technology infrastructure, a significant determinant of ICT access and use. Comparisons between state and private universities in Turkey will reveal critical similarities and differences among state and private universities in terms of ICT integration and use.
- **"Two sides to every story":** Research on language teaching or learning targets teachers and students. For (mostly) practical reasons, many studies focus on one side, therefore fail to identify and integrate responses from both sides. For instance, feedback from students is likely to contribute to studies aiming to evaluate teachers' ICT competence, since students, as "digital natives," can comment on their teachers' abilities.

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APPENDICES

APPENDIX A. COPY OF THE INTERVIEW QUESTIONS

Teacher's Name:

Teaching Level:

Years of Teaching Experience:

INTERVIEW QUESTIONS

1. How often do you use ICT tools? (How many hours a week?)
2. How long have you been using ICT tools in English lessons?
3. What type of ICT tools do you use in English lessons? For what purpose do you use them (videos, songs, etc.)?
4. Have you received any training for the use of ICT tools? (Do you think it is necessary?)
5. Do you think you are confident enough to use ICT tools in the classroom?
6. What are the advantages of using ICT tools in a classroom environment?
7. What kind of challenges do you experience as a teacher during the use of ICT tools?
8. Do you think that ICT tools have helped students' progress in English lessons?
9. What do you think about students' engagement in English classes with ICT tools? Are they more or less motivated in the classroom? Please give detail.